III. On some Abcrrations of Lepidoptera. By Percy I. Lathy, F.Z.S., F.E.S.

[Read November 4th, 1903.]

PLATE X.

The whole of the aberrations here described and figured are contained in the rich collection of Mr. Herbert J. Adams, F.E.S.

1. Melinæa mauensis, Butl.

A gynandromorphous example, the left side being female and the right male; this specimen is from Demerara.

2. Amathusia and amanensis, Fruhst.

A male with three ocelli on hind-wings below.

3. Morpho cacica, Stgr.

A male in which the submarginal white spots of fore-wing above are large and elongated; the discal pale band of fore-wing below shows through, in some lights giving the appearance of a band on the upper-side.

4. Acræa terpsichore, Linn. Pl. X, fig. 1.

A male with the black spots of hind-wing below much enlarged and elongated.

Received from Natal.

5. Heliconius aristiona, Hew.

A female with discal black spots of fore-wing absent, cellular and costal spots greatly reduced.

Taken by Messrs. Watkins and Tomlinson in Peru.

6. Heliconius sara, Fabr.

A female from Venezuela with the usual yellow markings white.

7. Heliconius sprucei, Bates.

A similar aberration to the preceding; obtained in Ecuador.

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8. Helieonius erato, Linn.

Another female aberration in which the yellow markings are replaced by white; the red markings are more pinkish in tinge than in typical specimens.

This example came from Venezuela in the same parcel as *H. sara*, Fabr., mentioned above.

9. Dione vanilla, Linn. Pl. X, fig. 2.

A female with all the black markings above increased and coalescent; the under-side differs little from typical specimens, except the cell of fore-wing is filled in with black.

This fine specimen was taken at Santa Barbara, California.

10. Brenthis myrina, Cram. Pl. X, fig. 3.

A male from Canada with discal black markings of both wings large and coalescent, in the fore-wing forming a wide black band.

11. Pyrameis indica, Herbst. Pl. X, fig. 4.

A remarkable aberration in which subapical white spots of forewing have disappeared, the lower one being indicated by an obscure reddish spot, the black markings in the red median band are also wanting; marginal red band of hind-wing much reduced, and the black spots replaced by a dark brown bar; the under-side of forewing differs from typical specimens in the same way as the upperside, while the hind-wing is much clouded with brown, therefore rendering the markings obscure.

This beautiful form is from Travancore, S. India.

12. Anartia jatrophæ, Linn.

A female from Dominica, Leeward Islands, having four discal black spots to hind-wing above, the additional two which are smaller being placed between the usual two.

13. Anartia saturata, Stgr. Pl. X, fig. 5.

A female with the transverse markings of both wings obscure and diffused, ocelli absent, and submarginal orange brown patches greatly elongated at apex of fore-wing and absent in hind-wing; under-side with all markings very obscure, submarginal ones and ocelli absent, hind-wing with faint red scaling.

This most beautiful variety was captured by the late Mr. Priddey in Haiti.

14. Callicore clymena, Cram. Pl. X, fig. 6.

A male in which hind-wing below has submarginal black band, and band dividing figure of eight markings wider, and black spots larger than usual, these resembling C. clymena, Cram.; the front discal band absent.

Taken in Peru by Messrs. Watkins and Tomlinson.

15. Catagramma hydaspes, Dru. Pl. X, fig. 7.

A male from Paraguay with black band beyond base of hind-wing below narrow and obscure, almost disappearing in cell; submarginal black band wider, its inner edge diffused.

16. Catagramma cyllene, D. and H. Pl. X, fig. 8.

A male with the submarginal black band of the hind-wing below narrower and much further from margin, and the blue markings it contains more lunular in shape.

Another of Messrs. Watkins and Tomlinson's captures in Peru.

17. Batesia hypoxantha, G. and S.

A curious freak in neuration, the subcostal nervure of hind-wing being connected with upper discoidal nervure by a short bar; this occurs on both hind-wings but in a different position, as on right wing the connection is formed some distance before submarginal black border, and on left wing on border.

18. Amnosia decora, Doubld.

A female with pale band of fore-wings below broken at middle median nervule.

19. Hypolimnas bolina, Linn. Pl. X, fig. 9.

A female with both wings above cream-colour, darker towards base and without markings, with exception of a little dark brown in and beyond upper part of cell of fore-wing and base of costa of hindwing. Under-side of fore-wing very similar to upper but dark cellular markings less and enclosing whitish spots, a little dark clouding at anal angle; hind-wing with a small dark mark at anal angle otherwise immaculate.

This specimen is from Fiji, and is a striking form even among the beautiful varieties that occur there.

20. Hypolimnas misippus, Linn.

A female with discal white spot on hind-wing above and below; this spot is faintly shot with blue above as in the male.

I received this specimen from Mr. G. F. Leigh, F.E.S., of Durban, Natal.

21. Hypolimnas deiois, Hew.

A male from Milne Bay, British New Guinea, having the usual white patch of hind-wing above replaced by a very small bluish one very similar to that in *H. paleutes*, Grose Smith.

22. Godartia eurinome, Cram.

I have already described this aberration of the female. Trans. Ent. Soc. Lond., 1903, p. 193, n. 109.

23. Euphædra francina, Godt.

A male from Sierra Leone with subapical yellow band of fore-wing obsolete.

24. Chlorippe vacuna, Godt.

A male from Espirito Santo, Brazil, in which discal spots of fore-wing above are white instead of orange.

25. Archonias curytele, Hew.

A male from Columbia has the usual yellow markings replaced by white.

26. Hesperocharis hirlanda, Stoll.

A male with ground-colour of both wings above pale yellow.

This and the following variety were taken by Messrs. Watkins and Tomlinson in Peru.

27. Hesperocharis nereina, Hopff.

A similar aberration to the preceding.

28. Dismorphia astynome, Dalm.

A female from Paraguay with the usual reddish-brown markings above yellow.

29. Delias belisama, Cram.

A male with hind-wing above pale yellow.

30. Prioneris autothisbe, Hübn.

- a. A male with discal area of hind-wing below yellowish-white and suffused with black scales,
 - b. A male with discal area of hind-wing below white.

31. Prioneris sita, Feld.

A male from S. India with nervules on both wings above and below widely bordered with black, in this respect resembling the female.

32. Teracolus crone, Angas. Pl. X, fig. 10.

A male with hind-wings above suffused with pinkish-brown, slightly iridescent.

Obtained in Natal.

33. Troides urvillianus, Guér.

a. A male with hind-wings above very densely scaled with black, and the black spots between nervules produced into bars which run into black scaling.

b. A male wanting black patch between median nervule and submedian nervure of hind-wing below.

34. Troides papuensis, Wall.

A pair with outer margin of fore-wings strongly incurved between middle and lower median nervules, in the female the outer margin of left fore-wing is also incurved near apex.

35. Papilio ridleyanus, White. Pl. X, fig. 11.

I described this pretty aberration in a previous number of the Transactions, June 1903, p. 203, n. 198, and now take the opportunity of figuring it.

36. Papilio athous, Feld.

Two males with fore-wing above devoid of white patch on inner margin.

37. Papilio anchisiades, Esp.

A male from Cayenne in which the usual red patches of hind-wing are blue.

38. Papilio lycophron, Hubn.

A striking aberration of the male in which the submarginal yellow markings of the hind-wing above have entirely disappeared, the under-side being normal.

39. Papilio demolion, Cram.

Three males from Nias with bands orange yellow.

40. Papilio chaon, Westw.

A male from Sikkim with left hind-wing below having submarginal yellow lunules much elongated at anal angle.

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41. Papilio thomsoni, Butl.

A male with discal white patches on hind-wing below.

42. Papilio joësa, Butl.

A male in which the usual brilliant blue is replaced by dull silvery blue.

43. Papilio memnon, Linn.

A female from Sumatra with five large elongated grevish-white patches between nervules of hind-wing above; this specimen belongs to the form which has red basal patch, and large white apical patch to fore-wing.

44. Papilio quas. Westw.

I have already recorded this gynandromorphous specimen, "Entomologist," June 1899, p. 148.

45. Papilio mikado, Leech? Pl. X, fig. 12.

The green markings are paler than in typical axion, Feld., more resembling the colours of those in gordion, Feld.; forewing above with cellular and discal markings large, the subapical spots being coalescent, submarginal spots obscure; hind-wing with nearly all costal area white, a long green fascia below subcostal nervure; under-side of fore-wing as above, but with pale markings coalescent with exception of the three lower submarginal spots; hind-wing with pale markings much extended and the red more diffused. This beautiful form came into Mr. Adams' possession with the Hourath Collection; the specimen bears no locality, but is probably from Japan, as it appears to be intermediate between typical mikado, Leech, and the form figured by Mr. Wileman under the name of albidus, Entom. xxxvi, n. 487, p. 300, 1903.

EXPLANATION OF PLATE X.

- Fig. 1. Acraa terpsichore, Linn.
 - 2. Dione vanillæ, Linn.
 - 3. Brenthis myrina, Cram.
 - 4. Pyramcis indica, Herbst.
- 5. Anartia saturata, Stgr.
- 6. Callicore elymena, Cram.
- ,, 7. Catagramma hydaspes, Dru.
- 8. ,, cyllenc, D. and H. 9. Hypolimnas bolina, Linn.
- , 10. Teracolus erone, Angas. ,, 11. Papilio ridleyanus, White.
- ,, 12. ,, mikado, Leech?